



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,847	12/08/2003	Satoru Shimizu	1743/228	9229

23838 7590 05/21/2004

KENYON & KENYON  
1500 K STREET, N.W., SUITE 700  
WASHINGTON, DC 20005

EXAMINER

CHARJOU, MOHAMED

ART UNIT PAPER NUMBER

2857

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Applicati n No.</b>	<b>Applicant(s)</b>	
	10/728,847	SHIMIZU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mohamed Charioui	2857	

-- Th MAILING DATE of this communicati n appears on the c ver sheet with th correspondence address --  
**Peri d f r Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7 is/are rejected.
- 7) ☒ Claim(s) 6 and 8-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Pri rity under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachm nt(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. **Figure 1** is objected to because boxes are not labeled, The Examiner directs the applicant to 37 C.F.R. 1.84(n) and 1.84(o) which state, "Graphical drawing symbols may be used for conventional elements when appropriate" while "[o]ther symbols which are not universally recognized may be used, subject to approval by the Office" and that "[s]uitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing". Since the drawing in Figure 1 does not contain conventional elements, the Examiner may require descriptive legends for better understanding of the drawings. See MPEP 608.02.

### *Claim Objections*

2. **Claims 1-12** are objected to because of the following informalities:

Claim 1 recites the limitation "said communication line" in page 2, line 8 in of amendment. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 4 and 5** are rejected under 35 U.S.C. 102(b) as being anticipated by Palusamy et al.

**As per claim 1**, Palusamy et al. teach a control device for control of an operation state and process amount of plant equipment (see col. 5, lines 34-68) and a maintenance tool operatively coupled via a network to the control device for performing maintenance of a controlling controller as built in the device (see col. 4, lines 8-31 and col. 5, lines 34-68), wherein the system further comprises a remote maintenance device for executing a function similar to that of the maintenance tool (see col. 5, lines 34-46), and the remote maintenance device is operable to receive process amount data or control signal data from the maintenance tool via a communication line (see col. 5, lines 34-68), and wherein data of report summarizing therein monitor search content and evaluation is sent toward the maintenance tool via the communication line (see col. 4, lines 8-31).

**As per claims 4 and 5**, Palusamy et al. further teach providing a maintenance service wherein, upon occurrence of an alarm due to plant control abnormality or upon issuance of a control failure search request through manipulation of said maintenance tool, the remote maintenance device receives plant data from the maintenance tool via the communication line (see col. 2, line 30 to col. 3, line 19; col. 11, line 62 to col. 12, line 12; col. 15, lines 42-55; and col. 13, lines 39-57), wherein a maintenance service providing person analyzes and evaluates the plant data at the remote maintenance device for preparation of a report (see col. 4, line 65 to col. 5, line 13; col. 5, lines 35-46; and col. 13, lines 39-58), and wherein data of the report is sent to the maintenance tool via communication line (see col. 6, lines 33-60 and col. 13, lines 39-58).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

---

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2, 3 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Palusamy et al. in view of Rock et al.

Palusamy et al. teach the system as stated above except that upon occurrence of an obstruction at the controlling controller the remote maintenance device receives error log information of the controlling controller from the maintenance tool via the communication line, wherein a maintenance service providing person analyzes the error log information at the remote maintenance device to thereby prepare an obstruction recovery procedure.

Rock et al. teach this feature (see col. 3, line 62 to col. 4, line 58). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Rock's teaching into Palusamy's invention, because the maintenance personnel would be notified immediately when an obstruction occurs; therefore, expedition of the obstruction recovery would be initialized to minimize or prevent operational down time and costly repairs.

***Allowable Subject Matter***

5. **Claims 6 and 8-12** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims and overcome the objection listed above.

---

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record teaches or suggests that the maintenance service providing person directly modifies more than one control parameter and control circuitry within the controlling controller via the communication line and the maintenance tool and the network, in combination with the rest of the claim limitations.

#### **Prior art**

6. The prior art made record and not relied upon is considered pertinent to applicant's disclosure:

**Ikeda et al. ['335]** disclose remote monitoring diagnostic system and method thereof.

**Horie et al. ['337]** disclose answer system for technical support, and technical support method.

**Arcella et al. ['465]** disclose online valve diagnostic monitoring system.

**Uvhida et al. ['958]** disclose plant monitoring and diagnosing method and system, as well as plant equipped with the system.

**Koyama et al. ['502]** disclose plant operation support apparatus and method using expert systems.

**Ghanime ['296]** discloses remote notification of machine diagnostic information utilizing a unique email address identifying the sensor, the associated machine, and the associated machine condition.

#### **Contact information**

Art Unit: 2857

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Charioui whose telephone number is (571)

272-2213. The examiner can normally be reached Monday through Friday, from 9 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohamed Charioui

5/13/04



MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800